INTERGRAPH GeoMedia™

*Communicate geographically with the next generation of GIS*

PRODUCT OVERVIEW

INTERGRAPH

# GeoMedia®

*Communicate geographically with the next generation of GIS*

GeoMedia version 2.0 provides major enhancements for integrating data from a variety of geographic information resources. In addition to data format support for MGE, FRAMME,™ ARC/INFO, and the Oracle® Spatial Cartridge (SC), GeoMedia 2.0 now includes data servers for MGDM, ESRI's ArcView Shape, and MicroStation® design files. Now you can spend your time actually working with data instead of trying to access it!

GeoMedia 2.0 also includes Imagineer™ Technical, Intergraph's award-winning 2D drafting product. Completely integrated with GeoMedia, Imagineer provides you with map layout capabilities unmatched by any other GIS product on the market.

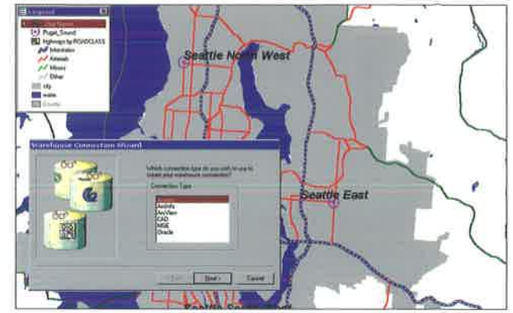
In fact, GeoMedia is the only GIS product that combines so many powerful tools. Communicate geographically as never before with the next generation of GIS, including:

- Seamless data integration with all major GIS vendor formats
- A complete set of spatial analysis tools
- Map layout with award-winning Imagineer Technical
- An open development platform for creating custom applications

## Multiple data warehouse access

GeoMedia makes it easy to access and share geographical data. Gone are the days when you were unable to use data because a different GIS software program was used to create it. GeoMedia's data servers provide you with live connections to data in native formats from the leading GIS products, including MGE, FRAMME, Oracle SC, MGE Segment Manager, Bentley's MicroStation CAD, and ESRI's ARC/INFO or ArcView Shape files. These live connections enable you to view and analyze multiple data sources simultaneously – a first for any GIS!

GeoMedia's data servers feature several key data access capabilities. The servers can perform coordinate transformation and feature definition. Server networking capability allows intranets to link to other corporate resources.



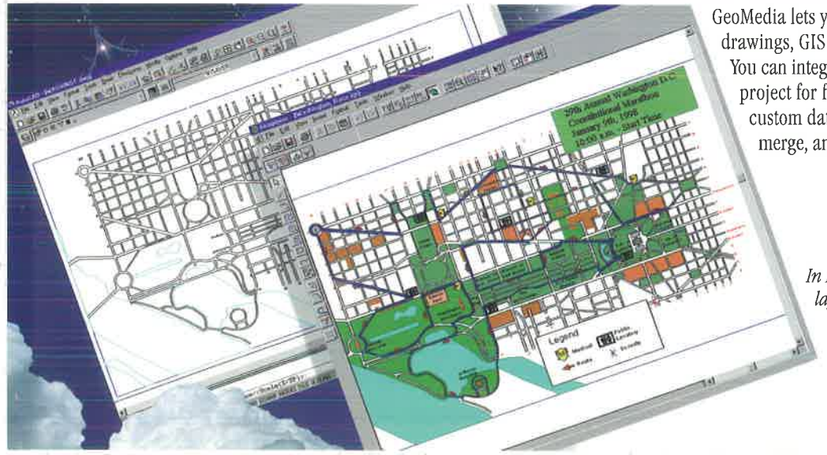

*Connect to multiple data warehouses simultaneously using GeoMedia's data servers.*

GeoMedia helps users "connect" to a variety of data sources using the Data Warehouse Wizard. The wizard helps to define data subsets by issuing a series of prompts: first, for connection types such as MGE and FRAMME; next, for themes such as woodland and cables; then, an optional prompt for restricting by geographic region such as administration area or search area. GeoMedia then performs an on-the-fly projection transformation to register the data to a common geographical reference system. These workflows, once very difficult to implement, are transparent in GeoMedia.

GeoMedia lets you expand data access on the network. From the Microsoft Windows® 95 and Windows NT® operating system environments, GeoMedia can access GIS and enterprise data over local or wide area networks. You can make and save multiple online connections within a session. GeoMedia also supports bi-directional linkage to Oracle SC, a part of Oracle Universal Server,® enabling you to efficiently store, access, manage, and manipulate geographic information the same way you use structured data. GeoMedia's compatibility with Oracle SC lets you access spatial and attribute data enterprisewide.

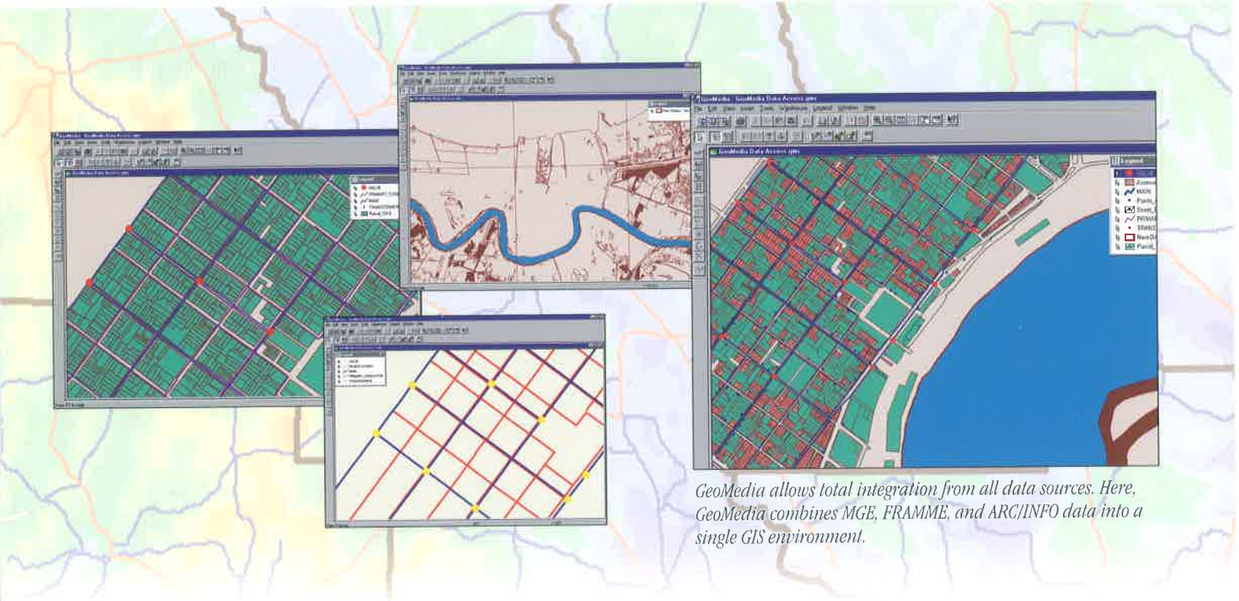
## Data integration with all major GIS vendor formats

GeoMedia supports multiple data-type connections. So you can integrate MGE, FRAMME, ARC/INFO, ArcView, and MicroStation data in a single environment. For example, you can begin working on an MGE project, combine it with information from your MicroStation CAD files, and then add ARC/INFO data. You can view several disparate data types within one window, or use them as input to a spatial query. GeoMedia is the tool you need to integrate all of your GIS data into one consistent analysis environment.




GeoMedia lets you combine geographical data from CAD drawings, GIS files, attribute databases, and raster images. You can integrate subsets of different data files into a separate project for further analysis, and then save that data in a custom dataset. Using GeoMedia, you can access, serve, merge, and align data – all on a single desktop.

*In Imagineer, GeoMedia 2.0 delivers the premier layout tools for map presentation.*

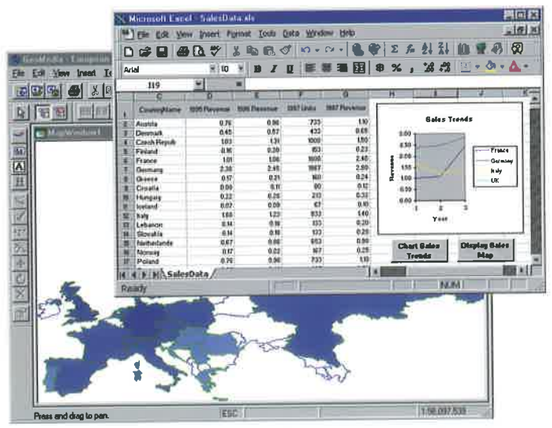


*GeoMedia allows total integration from all data sources. Here, GeoMedia combines MGE, FRAMME, and ARC/INFO data into a single GIS environment.*

## Map layout with Imagineer Technical

GeoMedia 2.0 surpasses expectations for map layout and display by providing a unique suite of styles and framing options. With Imagineer Technical, GeoMedia supplies you with an electronic canvas for designing custom map presentations. A fully integrated component of GeoMedia, Imagineer enables you to create custom map layouts that specify paper size, font styles, legend location, marginalia, area and linear patterning, and many other annotations and enhanced styling.

Imagineer offers intuitive productivity tools. The SmartSketch® feature places visual indicators next to the cursor as you draw to describe snap points, alignment indicators, centerpoints, and more. FreeSketch™ transforms freehand mouse sketches into precise geometry. Imagineer also maintains geometric relationships between elements, and provides automatic trim and extend features, as well as double-precision, floating-point 2D geometry.



*Drive GeoMedia directly from other office automation tools through OLE automation.*

Microsoft Office-compliant, Imagineer can be either an OLE container or a server and can provide links to other OLE-aware documents such as Excel and Word files. You can easily incorporate Imagineer drawings into presentation materials and reports. You can even customize Imagineer with OLE automation tools such as Visual Basic® to create custom workflows inside GeoMedia for specific projects.

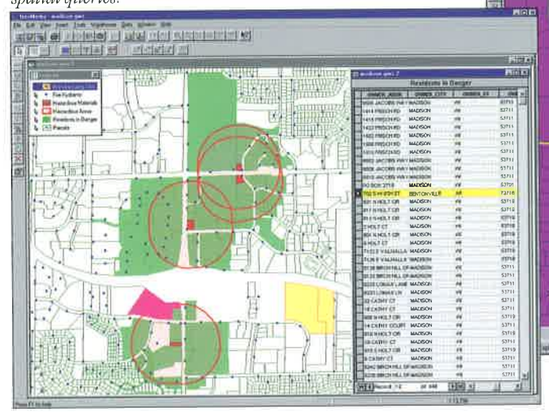
## A complete set of spatial analysis tools

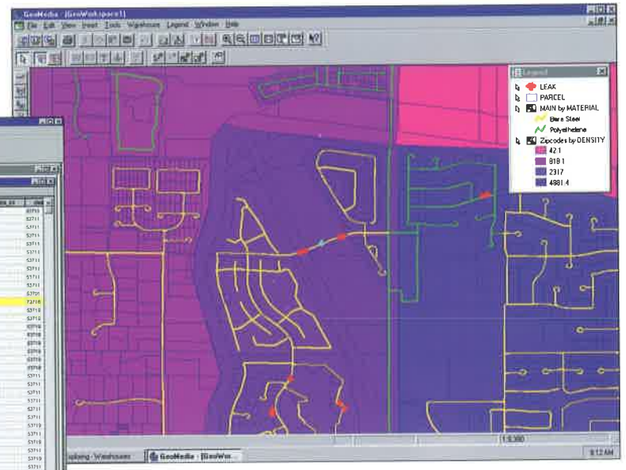
GeoMedia's complete set of advanced analysis tools lets you perform expert, complex spatial analyses. These include nine types of spatial functions, such as "entirely contained by" or "touches"; an entire suite of arithmetic operations; and all the tools necessary to create "what if" queries. You can create buffer zones and query spatial data within a specified area. GeoMedia's dynamic segmentation capabilities enable you to query and segment linear and point data from multiple MGE databases. Thematic mapping features create maps with color-coded and patterned attribute data, making information easier to obtain and more meaningful. And GeoMedia lets you create dynamic maps by integrating multimedia with GIS by hyperlinking to files that contain sounds, images, or text. You can even integrate satellite imagery with the other geographical information, and expand data sets by adding new features. A special addition for version 2.0 is the inclusion of a "join" capability to perform attribute geo-coding.

## Open development platform for creating custom applications

Unlike MapInfo and ArcView, GeoMedia doesn't require you to use a proprietary development language to change the user interface or develop specialized functionality. GeoMedia is compatible with standard Windows development tools and can be customized using OLE automation tools – such as Powersoft's Powerbuilder, Microsoft's Excel (with VBA), Visual Basic, and Visual C++® – for fast application prototyping.

*GeoMedia allows the user to easily construct advanced spatial queries.*

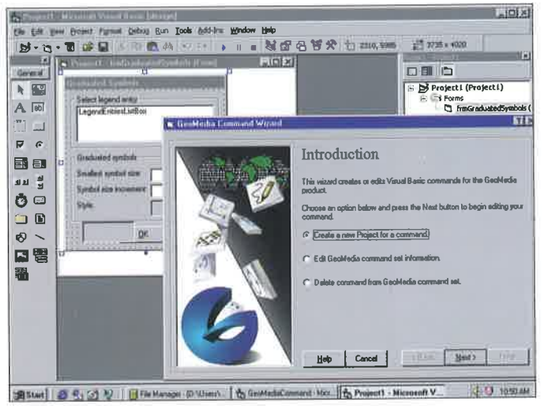




Using simple drag and drop, you can quickly tailor GeoMedia to your specifications, customizing toolbars, menus, and shortcuts the same way you tailor other Windows applications. Even nontechnical users can customize the user interface. GeoMedia also enables individual customization and maintains departmental consistency by storing scripts, styles, projections, and other resources shared throughout the organization.

## Communicate geographically

GeoMedia increases productivity and makes GIS data accessible to any user familiar with Windows. Using GeoMedia, you can transform your data into useful information for business and decision support. GeoMedia improves communication by providing you with the tools you need to make geographical data available throughout your enterprise. If you're ready to start communicating geographically, it's time you choose GeoMedia.



*Use the GeoMedia Customization Wizard in Visual Basic to help develop new applications.*

## Oracle Alliance

**Intergraph and Oracle have formed a GIS technology alliance that offers you the strength of Oracle's data management and the capabilities of Intergraph's leading-edge geographic applications. Oracle's Relational Database Management System contains the *Spatial Cartridge* (SC), a comprehensive data management, access, reliability, concurrency, and recoverability package. No special skills are needed by the database administrator to manage spatial data versus aspatial data types. The Spatial Cartridge provides the data structures, indexing methods, and access mechanisms that enable GIS application developers to build applications that can be distributed throughout the corporation. GeoMedia users quickly discover that Oracle SC provides them with the high-performance retrieval capability required to support interaction with large GIS datasets.**

**GeoMedia 2.0 delivers a data server for spatial data stored in Oracle SC and uses all of the optimizations Oracle includes for managing spatial data – without middleware. Intergraph and Oracle's collaborative efforts have resulted in three developments: an API for retrieving GIS data from a server, technology for embedding GIS data in Windows 95 and Windows NT applications, and an open environment that allows GIS applications to interact and exchange data.**

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## GeoMedia-based emergency call handling

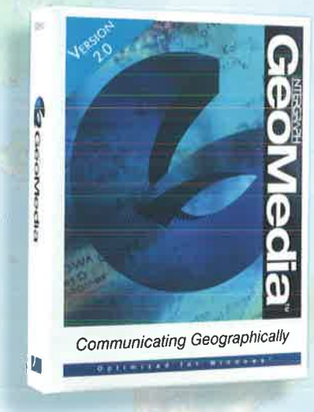
*Ron de Vet, Grontmij Geogroep*

Grontmij Geogroep uses GeoMedia for emergency call handling at Gasunie, the Dutch Gas Company. GeoMedia is fully customized according to the specific needs of Gasunie. This FRAMME-based system features the integration of various types of data, including streets and roads, municipalities and cities, and all gas pipelines.

## Integrating GIS with document management and forms/reports-based systems

*Kenneth Werther, ECI Consulting Engineers*

ECI Consulting Engineers has developed GlobalViewer, which provides seamless integration of GeoMedia (GIS), document management, and forms/reports-based systems such as SAP, Oracle, and Maximo.




## GeoMedia solutions in state and local government

*Lawrence Lefloff, Public Systems Associates*

Public Systems Associates (PSA) is proud to bring old-world craftsmanship to the new world of technology. PSA has been providing customized solutions incorporating world class, industry-compliant building blocks to state and local government for over twenty years. PSA provides a review of a full-featured constituent response system, which provides the ability to "see" your district through integrated use of GeoMedia and the nation's leading PC-based redistricting package. Integrated with Census TIGER/line files, both packages are field-proven, award-winning product sets that provide dynamic on-screen manipulation of geographic elements.

## The importance of GIS in an integrated management system

*Connie Gurghiek, MCI Systemhouse*

MCI Systemhouse is now implementing Mississippi DOT's Transportation Management Information System (TMIS) application. The end result of these efforts is a very powerful decision-making tool for Mississippi DOT. The TMIS application, which is being renamed to Interchange, encompasses pavement, bridge, and safety management. In addition to the data needed to support these systems, the Mississippi GIS-enabled data warehouse contains traffic, construction project, maintenance, financial, sign, and signal information. GeoMedia is an integral part of this application, providing not only a display tool, but also a means of analyzing and combining the many Mississippi DOT data sources.

## Team GeoMedia

Team GeoMedia is a coalition of leading independent software vendors, consultants, systems integrators, industry advisers, and data producers developing specialized applications with GeoMedia. Continuing Intergraph's commitment to the team concept, Team GeoMedia provides the technology leadership necessary to meet our customers' demands.

Partners in Team GeoMedia create numerous applications, including:

- Computer-aided mass appraisal (CAMA)
- Pavement management
- Asset management
- Market analysis
- Tax mapping
- Accident and crime analysis
- Transportation planning

The Team has published an online catalog of applications developed with GeoMedia. Explore the latest technical developments and innovations at *www.intergraph.com/geomedia/team_geo.htm*.

Buy GeoMedia today!
For more information or a demonstration call:

| | |
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| Canada | 1-800-461-5297 |
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www.intergraph.com/geomedia

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